

WHAT IS CLAIMED IS:

1. A transmitting apparatus for converting a coded bit stream into a trick play output and sending it to a transmission path, comprising:

5 accumulating means for accumulating the coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture;

output control means for controlling so as to output the coded bit stream in an output mode corresponding to a designated trick play operation;

rewriting means for rewriting control data which specifies a displaying order of the pictures with respect to said coded bit stream;

15 picture forming means for forming a picture obtained by copying a predetermined picture; and

output means for outputting a picture whose control data has been rewritten and said formed picture in accordance with the control of said output control means.

20 2. An apparatus according to claim 1, wherein said predetermined picture is the intra-frame coded picture or the forward predictive-coded picture, the copied picture is outputted as a skip P picture having a structure such that macroblocks other than macroblocks at both ends of a slice are skipped.

25 3. An apparatus according to claim 1, wherein as for the picture which is outputted, said rewriting means makes

data indicative of an accumulation amount of a virtual input buffer of a decoder in a picture header invalid.

4. An apparatus according to claim 1, wherein the coded bit stream by the trick play operation is outputted by repeating processes for outputting the intra-frame coded picture and, thereafter, outputting a plurality of copies pictures.

5. An apparatus according to claim 1, wherein by repeating processes such that after the intra-frame coded picture and the forward predictive-coded picture which repetitively appear at intervals (m), the copied pictures of the number larger than said (m) are outputted, the coded bit stream by a slow operation is outputted.

6. An apparatus according to claim 1, wherein the coded bit stream by a slow operation is formed so that the copied pictures are displayed subsequently to each of all pictures in the coded bit stream.

7. A transmission system of image information, comprising:

accumulating means for accumulating a coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture;

output control means for controlling so as to output the coded bit stream in an output mode corresponding to a designated trick play operation;

rewriting means for rewriting control data which

specifies a displaying order of the pictures with respect to said coded bit stream;

picture forming means for forming a picture obtained by copying a predetermined picture;

5 output means for outputting a picture whose control data has been rewritten and the formed picture as trick play output data in accordance with the control of said output control means;

a digital interface connected to said output means; and

an apparatus for recording or displaying the trick play output data received through said digital interface.

8. A transmitting method of image information for converting a coded bit stream into a trick play output and sending it to a transmission path, comprising:

an accumulating step of accumulating a coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture;

20 an output control step of controlling so as to output the coded bit stream in an output mode corresponding to a designated trick play operation;

a rewriting step of rewriting control data which specifies a displaying order of the pictures with respect to said coded bit stream;

25 a picture forming step of forming a picture obtained by copying a predetermined picture; and

an output step of outputting a picture whose control data has been rewritten and said formed picture in accordance with said output control.